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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/832,098 | 04/11/2001 | Cathy Liu | LIUC3002/EM/6680 | 8675 |

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EXAMINER

GIBBS, HEATHER D

ART UNIT PAPER NUMBER

2622

DATE MAILED: 02/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/832,098

Applicant(s)

LIU, CATHY

Examiner

Heather D Gibbs

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 April 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☒ Claim(s) 15 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 April 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) .
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION***Drawings***

1. Figures 1A and 1B should be designated by a legend such as –Prior Art– because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled “Replacement Sheet” in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the examiner does not accept the changes, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the driving means must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as

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either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the examiner does not accept the changes, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1,8 are rejected under 35 U.S.C. 102(b) as being anticipated by admitted prior art.

Applicant makes admission in the background section that the claims are already known. Regarding claim 1, which is representative of claim 8, Applicant admits an image scanning method for a scanner which has a preset constant calibration parameter located therein, comprising the steps of: a) providing a scanning object 131; b) using an image capturing element to perform image capturing on the scanning object 133; c) using the preset calibration parameter to perform compensation and calibration for the captured image 132; and d) completing image scanning for the object and repeating the step a 135 (Figs 1A and 1B).

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Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 2-5,9-10-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over admitted prior art in view of Wieloch (US 5,764,023).

Regarding claim 2, which is representative of claim 9, Applicant discloses wherein the scanner comprises: a holding board 10 for holding the scanning object 11 thereon; an optical chassis 12 having an image capturing element 124 located therein for capturing the image of the scanning object 11.

Applicant does not disclose expressly a control module having a read only memory (ROM) for storing a preset calibration parameter and using the stored calibration parameter to perform compensation and calibration for the captured image.

Wieloch discloses a control module having a read only memory (ROM) for storing a preset calibration parameter and using the stored calibration parameter to perform compensation and calibration for the captured image (Col 7 Lines 52-66).

Admitted prior art & Wieloch are combinable because they are from applications, which require control options.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the admitted prior art with Wieloch.

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The suggestion/motivation for doing so would have been to provide compensation and calibration for the captured image.

Therefore, it would have been obvious to combine the admitted prior art with Wieloch to obtain the invention as specified in claims 2,9.

Regarding claim 3, which is representative of claim 10, the admitted prior art disclose the holding board is selectively made of glass or acrylic (holding a scanning object which linear lamp tube projects light on and transmit the image to the lens).

Regarding claim 4, which is representative of claim 11, it is inherent that the image capturing element of the optical chassis be a charge coupled device (CCD).

Considering claim 5, which is representative of claim 12, Applicant admits wherein the optical chassis further includes a linear light source, a plurality of reflection mirrors and a lens, the linear light source projecting on the scanning object to generate a reflecting image which is reflected by the reflecting mirrors and refracted through the lens to form an image on the image capturing element (Background Section).

Considering claim 6, which is representative of claim 13, Applicant admits wherein the scanner further includes a driving means for moving the optical chassis along the holding board for scanning the object (Background Section).

Regarding claim 7, which is representative of claim 14, Wieloch teaches wherein the control module is a selected system file (Col 8 Lines 5-25).

7. Claims 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over admitted prior art in view of Spitz (US 5,939,697).

Applicant's admitted prior art discloses c) using an image capturing element to perform image capturing on the scanning object; d) using the calibration parameter

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obtained at the step a) to perform compensation and calibration for the captured image; and e) completing image scanning for the object and repeating the step b).

Applicant's admitted prior art does not disclose expressly a) judging if a control module having a calibration parameter is required; b) providing a scanning object if the outcome of the step a) is positive; wherein the following steps are performed when the outcome of the step a) is negative: a1) performing pre-scanning and calculating calibration parameter; and a2) storing the calibration parameter in the control module.

Spitz discloses expressly a) judging if a control module having a calibration parameter is required; b) providing a scanning object if the outcome of the step a) is positive; wherein the following steps are performed when the outcome of the step a) is negative: a1) performing pre-scanning and calculating calibration parameter; and a2) storing the calibration parameter in the control module (Col 8 Lines 19-28).

Applicant's admitted prior art & Spitz are combinable because they are from methods of calibration.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the admitted prior with Spitz.

The suggestion/motivation for doing so would have been as Spitz teaches the calibration parameter group may be retrieved as need (i.e. when the scanning object is positive). When the parameter group is not needed the outcome would be considered negative and hence pre-scanning would be performed and the calibration parameter would be stored in the computing and evaluation system 31.

Therefore, it would have been obvious to combine Spitz with the admitted prior to obtain the invention as specified in claims 15-16.

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8. Claim 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over admitted prior art and Spitz '697 in view of Wieloch '023.

Applicant's admitted prior art discloses: a holding board 10 for holding the scanning object 11 thereon; an optical chassis 12 having an image capturing element 124 located therein for capturing the image of the scanning object 11.

Applicant does not disclose expressly a control module having a read only memory (ROM) for storing a preset calibration parameter and using the stored calibration parameter to perform compensation and calibration for the captured image.

Wieloch discloses a control module having a read only memory (ROM) for storing a preset calibration parameter and using the stored calibration parameter to perform compensation and calibration for the captured image (Col 7 Lines 52-66).

Applicant's admitted prior art, Spitz & Wieloch are combinable because they are from calibration systems.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the admitted prior art, Spitz, and Wieloch.

The suggestion/motivation for doing so would have been to provide compensation and calibrations for the described system.

Therefore, it would have been obvious to combine the admitted prior art and Spitz with Wieloch to obtain the invention as specified in claim 17.

Considering claim 18, the admitted prior art disclose the holding board is selectively made of glass or acrylic (holding a scanning object which linear lamp tube projects light on and transmit the image to the lens) [Background Section].

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Regarding claim 19, it would be inherent that the image capturing element of the optical chassis be a charge coupled device (CCD).

Regarding claim 20, the admitted prior art disclose wherein the optical chassis further includes a linear light source, a plurality of reflection mirrors and a lens, the linear light source projecting on the scanning object to generate a reflecting image which is reflected by the reflecting mirrors and refracted through the lens to form an image on the image capturing element (Background Section).

Considering claim 21, admitted prior art disclose wherein the scanner further includes a driving means for moving the optical chassis along the holding board for scanning the object (Background Section).

Regarding claim 22, Wieloch teaches wherein the control module is a selected system file (Col 8 Lines 5-25).

Claim Objections

9. Claim 15 is objected to because of the following informalities: Page 10 Line 2, insert "is" so as to read —a calibration parameter is required—. Appropriate correction is required.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Heather D Gibbs whose telephone number is 703-306-4152. The examiner can normally be reached on M-F 8AM-4PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward L. Coles can be reached on 703-305-4712. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

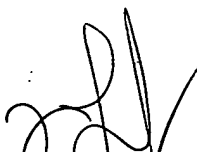
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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Heather D Gibbs
Examiner
Art Unit 2622

hdg



TWYLER LAMB
PRIMARY EXAMINER